



RAW SEQUENCE LISTING ERROR REPORT

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Application Serial Number: 10/803,580A
Source: IFWO
Date Processed by STIC: 6/17/04

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- 2) TELEPHONING APPLICANT AND FAXING A COPY OF THIS PRINTOUT, WITH A NOTICE TO COMPLY

FOR CRF SUBMISSION AND PATENTIN SOFTWARE QUESTIONS, PLEASE CONTACT MARK SPENCER, TELEPHONE: 571-272-2510; FAX: 571-273-0221

TO REDUCE ERRORED SEQUENCE LISTINGS, PLEASE USE THE CHECKER VERSION 4.2 PROGRAM, ACCESSIBLE THROUGH THE U.S. PATENT AND TRADEMARK OFFICE WEBSITE. SEE BELOW FOR ADDRESS:

<http://www.uspto.gov/web/offices/pac/checker/chkrnote.htm>

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Any reply including a sequence listing in electronic form should NOT be sent to the 20231 zip code address for the United States Patent and Trademark Office, and instead should be sent via the following to the indicated addresses:

1. EFS-Bio (<<http://www.uspto.gov/efc/efs/downloads/documents.htm>> , EFS Submission User Manual - cPAVE)
2. U.S. Postal Service: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450
3. Hand Carry, Federal Express, United Parcel Service, or other delivery service (EFFECTIVE 06/05/04):
U.S. Patent and Trademark Office, 220 20th Street S., Customer Window, Mail Stop Sequence, Crystal Plaza Two, Lobby, Room 1B03, Arlington, VA 22202

Revised 05/17/04



IFWO

RAW SEQUENCE LISTING

DATE: 06/17/2004

PATENT APPLICATION: US/10/803,580A

TIME: 07:29:17

Input Set : A:\SYR-HDAC-5005-C2 replacement 01.ST25.txt

Output Set: N:\CRF4\06172004\J803580A.raw

3 <110> APPLICANT: Syrrx, Inc.
 5 <120> TITLE OF INVENTION: HISTONE DEACETYLASE INHIBITORS
 7 <130> FILE REFERENCE: SYR-HDAC-5005-C2
 9 <140> CURRENT APPLICATION NUMBER: US 10/803,580A
 10 <141> CURRENT FILING DATE: 2004-03-17
 12 <150> PRIOR APPLICATION NUMBER: US 60/455,437
 13 <151> PRIOR FILING DATE: 2003-03-17
 15 <150> PRIOR APPLICATION NUMBER: US 60/531,203
 16 <151> PRIOR FILING DATE: 2003-12-19
 18 <160> NUMBER OF SEQ ID NOS: 8
 20 <170> SOFTWARE: PatentIn version 3.2
 22 <210> SEQ ID NO: 1

Does Not Comply
 Corrected Diskette Needed
 (pg. 1-3, 5)

23 <211> LENGTH: 513
 24 <212> TYPE: PRT

25 <213> ORGANISM: Artificial

27 <220> FEATURE:

28 <223> OTHER INFORMATION: Residues 1-482 of HDAC1 and a 6-histidine tag at the N-terminus

Please explain the remaining residues, per the total length of the sequence.

30 <400> SEQUENCE: 1

32	Met	Ser	Tyr	Tyr	His	His	His	His	His	His	Asp	Tyr	Asp	Ile	Pro	Thr
33	1				5						10				15	
36	Thr	Glu	Asn	Leu	Tyr	Phe	Gln	Gly	Ala	Met	Glu	Pro	Gly	Gly	Ser	Met
37				20					25					30		
40	Ala	Gln	Thr	Gln	Gly	Thr	Arg	Arg	Lys	Val	Cys	Tyr	Tyr	Asp	Gly	
41			35					40				45				
44	Asp	Val	Gly	Asn	Tyr	Tyr	Tyr	Gly	Gln	Gly	His	Pro	Met	Lys	Pro	His
45		50				55					60					
48	Arg	Ile	Arg	Met	Thr	His	Asn	Leu	Leu	Leu	Asn	Tyr	Gly	Leu	Tyr	Arg
49	65				70					75					80	
52	Lys	Met	Glu	Ile	Tyr	Arg	Pro	His	Lys	Ala	Asn	Ala	Glu	Glu	Met	Thr
53				85					90					95		
56	Lys	Tyr	His	Ser	Asp	Asp	Tyr	Ile	Lys	Phe	Leu	Arg	Ser	Ile	Arg	Pro
57			100						105					110		
60	Asp	Asn	Met	Ser	Glu	Tyr	Ser	Lys	Gln	Met	Gln	Arg	Phe	Asn	Val	Gly
61			115						120					125		
64	Glu	Asp	Cys	Pro	Val	Phe	Asp	Gly	Leu	Phe	Glu	Phe	Cys	Gln	Leu	Ser
65		130						135					140			
68	Thr	Gly	Gly	Ser	Val	Ala	Ser	Ala	Val	Lys	Leu	Asn	Lys	Gln	Gln	Thr
69	145					150					155				160	
72	Asp	Ile	Ala	Val	Asn	Trp	Ala	Gly	Gly	Leu	His	His	Ala	Lys	Lys	Ser
73				165					170					175		
76	Glu	Ala	Ser	Gly	Phe	Cys	Tyr	Val	Asn	Asp	Ile	Val	Leu	Ala	Ile	Leu
77			180						185					190		
80	Glu	Leu	Leu	Lys	Tyr	His	Gln	Arg	Val	Leu	Tyr	Ile	Asp	Ile	Asp	Ile

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81          195          200          205
84 His His Gly Asp Gly Val Glu Glu Ala Phe Tyr Thr Thr Asp Arg Val
85          210          215          220
88 Met Thr Val Ser Phe His Lys Tyr Gly Glu Tyr Phe Pro Gly Thr Gly
89 225          230          235          240
92 Asp Leu Arg Asp Ile Gly Ala Gly Lys Gly Lys Tyr Tyr Ala Val Asn
93          245          250          255
96 Tyr Pro Leu Arg Asp Gly Ile Asp Asp Glu Ser Tyr Glu Ala Ile Phe
97          260          265          270
100 Lys Pro Val Met Ser Lys Val Met Glu Met Phe Gln Pro Ser Ala Val
101          275          280          285
104 Val Leu Gln Cys Gly Ser Asp Ser Leu Ser Gly Asp Arg Leu Gly Cys
105          290          295          300
108 Phe Asn Leu Thr Ile Lys Gly His Ala Lys Cys Val Glu Phe Val Lys
109 305          310          315          320
112 Ser Phe Asn Leu Pro Met Leu Met Leu Gly Gly Gly Gly Tyr Thr Ile
113          325          330          335
116 Arg Asn Val Ala Arg Cys Trp Thr Tyr Glu Thr Ala Val Ala Leu Asp
117          340          345          350
120 Thr Glu Ile Pro Asn Glu Leu Pro Tyr Asn Asp Tyr Phe Glu Tyr Phe
121          355          360          365
124 Gly Pro Asp Phe Lys Leu His Ile Ser Pro Ser Asn Met Thr Asn Gln
125          370          375          380
128 Asn Thr Asn Glu Tyr Leu Glu Lys Ile Lys Gln Arg Leu Phe Glu Asn
129 385          390          395          400
132 Leu Arg Met Leu Pro His Ala Pro Gly Val Gln Met Gln Ala Ile Pro
133          405          410          415
136 Glu Asp Ala Ile Pro Glu Glu Ser Gly Asp Glu Asp Glu Asp Asp Pro
137          420          425          430
140 Asp Lys Arg Ile Ser Ile Cys Ser Ser Asp Lys Arg Ile Ala Cys Glu
141          435          440          445
144 Glu Glu Phe Ser Asp Ser Glu Glu Glu Gly Glu Gly Gly Arg Lys Asn
145          450          455          460
148 Ser Ser Asn Phe Lys Lys Ala Lys Arg Val Lys Thr Glu Asp Glu Lys
149 465          470          475          480
152 Glu Lys Asp Pro Glu Glu Lys Lys Glu Val Thr Glu Glu Glu Lys Thr
153          485          490          495
156 Lys Glu Glu Lys Pro Glu Ala Lys Gly Val Lys Glu Glu Val Lys Leu
157          500          505          510

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160 Ala

164 <210> SEQ ID NO: 2

165 <211> LENGTH: 1542

166 <212> TYPE: DNA

167 <213> ORGANISM: Artificial

169 <220> FEATURE:

170 <223> OTHER INFORMATION: DNA sequence encoding residues 1-482 of HDAC1 and a 6-

histidine

171 tag at the N-terminus

173 <400> SEQUENCE: 2

174 atgtcgtact accatcacca tcaccatcac gattacgata tcccaacgac cgaaaacctg

60

please explain the
remaining residues,
per the total
length
of
the
sequence

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DATE: 06/17/2004

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Input Set : A:\SYR-HDAC-5005-C2 replacement 01.ST25.txt

Output Set: N:\CRF4\06172004\J803580A.raw

```

176 tatttttcagg gcgccatgga acccggggga tccatggcgc agacgcaggg caccgcggagg 120
178 aaagtctgtt actactacga cggggatgtt ggaaattact attatggaca aggccaccca 180
180 atgaagcctc accgaatccg catgactcat aatttgctgc tcaactatgg tctctaccga 240
182 aaaatggaaa tctatcgccc tcacaaagcc aatgctgagg agatgaccaa gtaccacagc 300
184 gatgactaca ttaaattctt gcgctccatc cgtccagata acatgtcggg gtacagcaag 360
186 cagatgcaga gattcaacgt tggtagggac tgtccagtat tcgatggcct gtttgagttc 420
188 tgtcagttgt ctactgggtg ttctgtggca agtgctgtga aacttaataa gcagcagacg 480
190 gacatcgctg tgaattgggc tgggggcctg caccatgcaa agaagtccga ggcactctggc 540
192 ttctgttacg tcaatgatat cgtcttggcc atcctggaac tgctaaagta tcaccagagg 600
194 gtgctgtaca ttgacattga tattcaccat ggtgacggcg tggaaagagg cttctacacc 660
196 acggaccggg tcatgactgt gtcttttcat aagtatggag agtacttccc aggaactggg 720
198 gacctacggg atatcggggc tggcaaaggc aagtattatg ctgttaacta cccgctccga 780
200 gacgggattg atgacgagtc ctatgaggcc attttcaagc cggtcatgtc caaagtaatg 840
202 gagatgttcc agcctagtgc ggtgggtctta cagtgtggct cagactccct atctggggat 900
204 cggttagggt gcttcaatct aactatcaaa ggacacgcca agtgtgtgga atttgtcaag 960
206 agctttaacc tgccatgct gatgctggga ggcgggtggt acaccattcg taacgttgcc 1020
208 cggtgctgga catatgagac agctgtggcc ctggatacgg agatccctaa tgagcttcca 1080
210 tacaatgact actttgaata ctttggacca gatttcaagc tccacatcag tccttccaat 1140
212 atgactaacc agaacacgaa tgagtacctg gagaagatca aacagcgact gtttgagaac 1200
214 cttagaatgc tgccgcacgc acctggggtc caaatgcagg cgattcctga ggacgccatc 1260
216 cctgaggaga gtggcgatga ggacgaagac gacctgaca agcgcactc gatctgctcc 1320
218 tctgacaaac gaattgcctg tgaggaagag ttctccgatt ctgaagagga gggagagggg 1380
220 ggccgcaaga actcttccaa cttcaaaaaa gccaaagagag tcaaaaacaga ggatgaaaaa 1440
222 gagaaagacc cagaggagaa gaaagaagtc accgaagagg agaaaaccaa ggaggagaag 1500
224 ccagaagcca aaggggtcaa ggaggaggtc aagttggcct ga 1542

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227 <210> SEQ ID NO: 3

228 <211> LENGTH: 498

229 <212> TYPE: PRT

230 <213> ORGANISM: Artificial

232 <220> FEATURE:

233 <223> OTHER INFORMATION: Residues 1-488 of HDAC2 and a 6-histidine tag at the C-terminus

235 <400> SEQUENCE: 3

237 Met Gly Ser Met Ala Tyr Ser Gln Gly Gly Gly Lys Lys Lys Val Cys

238 1 5 10 15

241 Tyr Tyr Tyr Asp Gly Asp Ile Gly Asn Tyr Tyr Tyr Gly Gln Gly His

242 20 25 30

245 Pro Met Lys Pro His Arg Ile Arg Met Thr His Asn Leu Leu Leu Asn

246 35 40 45

249 Tyr Gly Leu Tyr Arg Lys Met Glu Ile Tyr Arg Pro His Lys Ala Thr

250 50 55 60

253 Ala Glu Glu Met Thr Lys Tyr His Ser Asp Glu Tyr Ile Lys Phe Leu

254 65 70 75 80

257 Arg Ser Ile Arg Pro Asp Asn Met Ser Glu Tyr Ser Lys Gln Met Gln

258 85 90 95

261 Arg Phe Asn Val Gly Glu Asp Cys Pro Val Phe Asp Gly Leu Phe Glu

262 100 105 110

265 Phe Cys Gln Leu Ser Thr Gly Gly Ser Val Ala Gly Ala Val Lys Leu

266 115 120 125

269 Asn Arg Gln Gln Thr Asp Met Ala Val Asn Trp Ala Gly Gly Leu His

SAME ERROR

RAW SEQUENCE LISTING

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PATENT APPLICATION: US/10/803,580A

TIME: 07:29:17

Input Set : A:\SYR-HDAC-5005-C2 replacement 01.ST25.txt

Output Set: N:\CRF4\06172004\J803580A.raw

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270      130      135      140
273 His Ala Lys Lys Ser Glu Ala Ser Gly Phe Cys Tyr Val Asn Asp Ile
274 145      150      155      160
277 Val Leu Ala Ile Leu Glu Leu Leu Lys Tyr His Gln Arg Val Leu Tyr
278      165      170      175
281 Ile Asp Ile Asp Ile His His Gly Asp Gly Val Glu Glu Ala Phe Tyr
282      180      185      190
285 Thr Thr Asp Arg Val Met Thr Val Ser Phe His Lys Tyr Gly Glu Tyr
286      195      200      205
289 Phe Pro Gly Thr Gly Asp Leu Arg Asp Ile Gly Ala Gly Lys Gly Lys
290      210      215      220
293 Tyr Tyr Ala Val Asn Phe Pro Met Arg Asp Gly Ile Asp Asp Glu Ser
294 225      230      235      240
297 Tyr Gly Gln Ile Phe Lys Pro Ile Ile Ser Lys Val Met Glu Met Tyr
298      245      250      255
301 Gln Pro Ser Ala Val Val Leu Gln Cys Gly Ala Asp Ser Leu Ser Gly
302      260      265      270
305 Asp Arg Leu Gly Cys Phe Asn Leu Thr Val Lys Gly His Ala Lys Cys
306      275      280      285
309 Val Glu Val Val Lys Thr Phe Asn Leu Pro Leu Leu Met Leu Gly Gly
310      290      295      300
313 Gly Gly Tyr Thr Ile Arg Asn Val Ala Arg Cys Trp Thr Tyr Glu Thr
314 305      310      315      320
317 Ala Val Ala Leu Asp Cys Glu Ile Pro Asn Glu Leu Pro Tyr Asn Asp
318      325      330      335
321 Tyr Phe Glu Tyr Phe Gly Pro Asp Phe Lys Leu His Ile Ser Pro Ser
322      340      345      350
325 Asn Met Thr Asn Gln Asn Thr Pro Glu Tyr Met Glu Lys Ile Lys Gln
326      355      360      365
329 Arg Leu Phe Glu Asn Leu Arg Met Leu Pro His Ala Pro Gly Val Gln
330      370      375      380
333 Met Gln Ala Ile Pro Glu Asp Ala Val His Glu Asp Ser Gly Asp Glu
334 385      390      395      400
337 Asp Gly Glu Asp Pro Asp Lys Arg Ile Ser Ile Arg Ala Ser Asp Lys
338      405      410      415
341 Arg Ile Ala Cys Asp Glu Glu Phe Ser Asp Ser Glu Asp Glu Gly Glu
342      420      425      430
345 Gly Gly Arg Arg Asn Val Ala Asp His Lys Lys Gly Ala Lys Lys Ala
346      435      440      445
349 Arg Ile Glu Glu Asp Lys Lys Glu Thr Glu Asp Lys Lys Thr Asp Val
350      450      455      460
353 Lys Glu Glu Asp Lys Ser Lys Asp Asn Ser Gly Glu Lys Thr Asp Thr
354 465      470      475      480
357 Lys Gly Thr Lys Ser Glu Gln Leu Ser Asn Pro Gly His His His His
358      485      490      495
361 His His
365 <210> SEQ ID NO: 4
366 <211> LENGTH: 1497
367 <212> TYPE: DNA

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RAW SEQUENCE LISTING

DATE: 06/17/2004

PATENT APPLICATION: US/10/803,580A

TIME: 07:29:17

Input Set : A:\SYR-HDAC-5005-C2 replacement 01.ST25.txt

Output Set: N:\CRF4\06172004\J803580A.raw

368 <213> ORGANISM: Artificial

370 <220> FEATURE:

371 <223> OTHER INFORMATION: DNA sequence encoding residues 1-488 of HDAC2 and a 6-histidine tag at the C-terminus

372 tag at the C-terminus

374 <400> SEQUENCE: 4

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375 atgggatcca tggcgtagacag tcaaggaggc ggcaaaaaaa aagtctgcta ctactacgac      60
377 ggtgatattg gaaattatta ttatggacag ggtcatccca tgaagcctca tagaatccgc      120
379 atgaccata acttgctgtt aaattatggc ttatacagaa aaatggaaat atataggccc      180
381 cataaagcca ctgccgaaga aatgacaaaa tatcacagt atgagtatat caaatttcta      240
383 cggtaataaa gaccagataa catgtctgag tatagtaagc agatgcagag atttaattgtt      300
385 ggagaagatt gtccagtgtt tgatggactc tttgagtttt gtcagctctc aactggcggt      360
387 tcagttgctg gagctgtgaa gttaaaccga caacagactg atatggctgt taattgggct      420
389 ggaggattac atcatgctaa gaaatcagaa gcatcaggat tctgttacgt taatgatatt      480
391 gtgcttgcca tccttgaatt actaaagtat catcagagag tcttatatat tgatatagat      540
393 attcatcatg gtgatgggtg tgaagaagct ttttatacaa cagatcgtgt aatgacggta      600
395 tcattccata aatatgggga atactttcct ggacaggag acttgaggga tattgggtgt      660
397 ggaaaaggca aatactatgc tgtcaatttt ccaatgagag atggtataga tgatgagtca      720
399 tatgggcaga tatttaagcc tattatctca aaggatgatg agatgtatca acctagtgt      780
401 gtggatttac agtgtgggtg agactcatta tctggtgata gactgggttg tttcaatcta      840
403 acagtcaaag gtcattgtaa atgtgtagaa gttgtaaaaa cttttaactt accattactg      900
405 atgcttggag gaggtggcta cacaatccgt aatgttgctc gatgttggac atatgagact      960
407 gcagttgccc ttgattgtga gattcccaat gagttgccat ataattgatta ctttgagtat      1020
409 tttggaccag acttcaaact gcatattagt ccttcaaaca tgacaaacca gaacactcca      1080
411 gaatatatgg aaaagataaa acagcgtttg tttgaaaatt tgcgcagtgt acctcatgca      1140
413 cctggtgtcc agatgcaagc tattccagaa gatgctgttc atgaagacag tggagatgaa      1200
415 gatggagaag atccagacaa gagaatttct attcgagcat cagacaagcg gatagcttgt      1260
417 gatgaagaat tctcagattc tgaggatgaa ggagaaggag gtcgaagaaa tgtggctgat      1320
419 cataaгааag gagcaaagaa agctagaatt gaagaagata agaaagaaac agaggacaaa      1380
421 aaaacagacg ttaaggaaga agataaatcc aaggacaaca gtggtgaaaa aacagatacc      1440
423 aaaggaacca aatcagaaca gtcagcaac cccgggcatc accatcacca tcaactaa      1497

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426 <210> SEQ ID NO: 5

427 <211> LENGTH: 782

428 <212> TYPE: PRT

429 <213> ORGANISM: Artificial

431 <220> FEATURE:

432 <223> OTHER INFORMATION: Residues 73-845 of HDAC6 and a 6-histidine tag at the C-terminus

434 <400> SEQUENCE: 5

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436 Met Pro Gly Met Asp Leu Asn Leu Glu Ala Glu Ala Leu Ala Gly Thr
437 1          5          10          15
440 Gly Leu Val Leu Asp Glu Gln Leu Asn Glu Phe His Cys Leu Trp Asp
441          20          25          30
444 Asp Ser Phe Pro Glu Gly Pro Glu Arg Leu His Ala Ile Lys Glu Gln
445          35          40          45
448 Leu Ile Gln Glu Gly Leu Leu Asp Arg Cys Val Ser Phe Gln Ala Arg
449          50          55          60
452 Phe Ala Glu Lys Glu Glu Leu Met Leu Val His Ser Leu Glu Tyr Ile
453 65          70          75          80
456 Asp Leu Met Glu Thr Thr Gln Tyr Met Asn Glu Gly Glu Leu Arg Val
457          85          90          95

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Output Set: N:\CRF4\06172004\J803580A.raw

Invalid <213> Response:

Use of "Artificial" only as "<213> Organism" response is incomplete,
per 1.823(b) of New Sequence Rules. Valid response is Artificial Sequence.

Seq#:1,2,3,4,5,6,7,8

VERIFICATION SUMMARY

DATE: 06/17/2004

PATENT APPLICATION: US/10/803,580A

TIME: 07:29:18

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